

Case 2783

Cryptophagus* Herbst, 1792, *Dorcatoma* Herbst, 1792, *Rhizophagus* Herbst, 1793 and *Colon* Herbst, 1797 (Insecta: Coleoptera): proposed conservation as the correct spellings, and proposed conservation of *Lyctus bipustulatus* Fabricius, 1792 as the type species of *Rhizophagus

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Abstract. The purpose of this application is to conserve the names *Cryptophagus*, *Dorcatoma*, *Rhizophagus* and *Colon* for four beetle genera originally spelt *Kryptophagus*, *Dorkatoma*, *Ryzophagus* and *Kolon*. These were emended to *Cryptophagus* (by Paykull, 1800), *Dorcatoma* (by Fabricius, 1801), *Rhizophagus* (by Illiger, 1801) and *Colon* (by Illiger, 1801) and the emended names are now almost universally used. It is proposed to rule that these unjustified emendations are deemed to be the correct original spellings. It is also proposed that the designation by Westwood ([1838]) of *Lyctus bipustulatus* Fabricius, 1792 as the type species of *Rhizophagus* be deemed as valid.

1. In parts 4, 5 and 7 of his *Natursystem aller bekannten in- und ausländischen Insekten*, published between 1792 and 1797, Herbst established a number of genera of which four are considered here. These are *Kryptophagus* (1792), *Dorkatoma* (1792), *Ryzophagus* (1793) and *Kolon* (1797). Within a few years unjustified emendations (technically incorrect spellings, although they were clearly deliberate transliterations) had been made to each of these names. The spelling of these emendations is almost universally used with authorship attributed to Herbst. In addition to the examples given of such usage, the Commission Secretariat holds a list of 18 works by 14 authors over the last 40 years. Each of the four names is considered in turn.

2. *Kryptophagus* was established by Herbst (1792, p. 172) with seven included species. Among them was *Kryptophagus crenatus* (p. 177, pl. 42, fig. 14), for which he gave *Dermestes cellaris* Scopoli, 1763 (p. 16) as a synonym. Paykull (1800, p. 352) spelled the name *Cryptophagus*, and this latter spelling has been used ever since (e.g. Kocher, 1956, p. 59; Hansen, 1964, p. 263; Brakman, 1966, p. 118). Westwood ([1838], p. 13) designated *Dermestes cellaris* Scopoli as the type species of *Cryptophagus*. The family-group name is invariably spelled CRYPTOPHAGIDAE.

3. *Dorkatoma* was established by Herbst (1792, p. 103) with a single species, *Dorkatoma dresdensis* Herbst, 1792 (p. 104, pl. 39, fig. 8), which is the type species by monotypy. Fabricius (1801, p. 330) spelled the name *Dorcatoma* and this latter spelling has been used ever since (e.g. Kocher, 1956, p. 127; Hansen, 1964, p. 300; Brakman, 1966, p. 134). The family-group name is invariably spelled DORCATOMINAE.

4. *Ryzophagus* was established by Herbst (1793, p. 18) with three included new species, among them *R. bipunctatus* (p. 19, pl. 45, fig. 9). Illiger (1801, p. 149) spelled the name *Rhizophagus*. Gyllenhal (1813, p. 420) spelled the genus *Rhyzophagus* and

that spelling was used for a few years. Erichson (1845, p. 226) reverted to Illiger's spelling *Rhizophagus* and this spelling has been used by all subsequent authors with the exception of Říha. In a paper published in 1989 Říha wrote (p. 358): '*Ryzophagus* Herbst, 1793 is a correct original spelling under Article 32b of the Code and should be used. The name *Rhyzophagus* Gyllenhal 1813 is an incorrect subsequent spelling, and *Rhizophagus* Erichson, 1843 is an unjustified emendation and must be regarded as a junior synonym under Article 33b(iii) of the Code. The commonly used name '*Rhizophagus* Herbst, 1793' [sic!] has never been established'. Říha was apparently unaware of Illiger's earlier adoption of *Rhizophagus*. Westwood ([1838], p. 13) designated *Lyctus bipustulatus* Fabricius, 1792 (p. 503) as the type species of *Rhizophagus*. This designation is technically invalid since, although *Ryzophagus bipunctatus* Herbst had long been considered a synonym of *L. bipustulatus*, Westwood did not mention Herbst's name and Herbst had not cited *L. bipustulatus*. Nevertheless stability would be best served by validation of the long accepted type species designation. I am not aware of any designation of an originally included nominal species. The family-group name is spelled RHIZOPHAGIDAE by all authors other than Říha (1989).

5. *Kolon* was established by Herbst (1797, p. 224) with two new included species, one of them being *K. viennensis* Herbst, 1797 (p. 225, pl. 109, fig. 10). Illiger (1801, p. 133) spelled the name *Colon* and this latter spelling has been used ever since (e.g. Kocher, 1958, p. 69; Hansen, 1964, p. 76; Brakman, 1966, p. 32). Thomson (1859, p. 60) designated *Colon viennensis* as type species of the genus. The family-group name is invariably spelled COLONIDAE.

6. As pointed out by Říha (1989) in the case of *Rhizophagus* (see para. 4 above), Herbst's original spellings are the correct ones. However, they have not been used in any subsequent work with the single exception of *Ryzophagus* in Říha's paper. Even when the correctness of Herbst's original spellings has been acknowledged, the emended spelling has been retained (e.g. Pope, 1977). The family-group names CRYPTOPHAGIDAE Kirby, 1837, DORCATOMINAE Thomson, 1859, RHIZOPHAGIDAE Redtenbacher, 1845 and COLONIDAE Horn, 1880 are derived from the currently-used spellings of the four generic names. A change back to Herbst's original spelling of these four generic names would cause considerable confusion, particularly since such names are often listed alphabetically.

7. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to rule that:

(a) the correct original spellings of the following names are deemed to be as shown:

- (i) *Kryptophagus* Herbst, 1792 to be *Cryptophagus*;
- (ii) *Dorkatoma* Herbst, 1792 to be *Dorcatoma*;
- (iii) *Ryzophagus* Herbst, 1793 to be *Rhizophagus*;
- (iv) *Kolon* Herbst, 1797 to be *Colon*;

(b) the designation by Westwood ([1838]) of *Lyctus bipustulatus* Fabricius, 1792 as the type species of *Rhizophagus* Herbst, 1793 is deemed to be valid;

(2) to place on the Official List of Generic Names in Zoology the following names:

(a) *Cryptophagus* Herbst, 1792 (gender: masculine), type species by subsequent designation by Westwood ([1838]) *Dermestes cellaris* Scopoli, 1763;

- (b) *Dorcatoma* Herbst, 1792 (gender: neuter), type species by original monotypy *Dorkatoma dresdensis* Herbst, 1792;
- (c) *Rhizophagus* Herbst, 1793 (gender: masculine), type species by subsequent designation by Westwood ([1838]) *Lyctus bipustulatus* Fabricius, 1792 as ruled in (1)(b) above;
- (d) *Colon* Herbst, 1797 (gender: neuter), type species by subsequent designation by Thomson (1859) *Kolon viennensis* Herbst, 1797;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *cellaris* Scopoli, 1763, as published in the binomen *Dermestes cellaris* (specific name of the type species of *Cryptophagus* Herbst, 1792);
 - (b) *dresdensis* Herbst, 1792, as published in the binomen *Dorkatoma dresdensis* (specific name of the type species of *Dorcatoma* Herbst, 1792);
 - (c) *bipustulatus* Fabricius, 1792, as published in the binomen *Lyctus bipustulatus* (specific name of the type species of *Rhizophagus* Herbst, 1793);
 - (d) *viennensis* Herbst, 1797, as published in the binomen *Kolon viennensis* (specific name of the type species of *Colon* Herbst, 1797);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
 - (a) *Kryptophagus* Herbst, 1792 (incorrect original spelling of *Cryptophagus* Herbst, 1792);
 - (b) *Dorkatoma* Herbst, 1792 (incorrect original spelling of *Dorcatoma* Herbst, 1792);
 - (c) *Ryzophagus* Herbst, 1793 (incorrect original spelling of *Rhizophagus* Herbst, 1793);
 - (d) *Rhyzophagus* Gyllenhal, 1813 (incorrect subsequent spelling of *Rhizophagus* Herbst, 1793);
 - (e) *Kolon* Herbst, 1797 (incorrect original spelling of *Colon* Herbst, 1797).

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